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This file captures an image of the Fetzer Franklin Fund website at www.fetzerfranklinfund.org as of May, 2020. Each file in this library contains the content from a different section of the website. The Fetzer Franklin Fund has been operated by the Fetzer Memorial Trust since its inception in 2005, with the support of the Fetzer Institute. The inspiration of this science program stemmed from the vision of John E. Fetzer, who wrote

“I feel that we are on the threshold of a new order where people will be seeking enlightened change. ... This will all come about with the infusion of spirituality into science. The Foundation’s eventual intent is to integrate the scientific process with spiritual mindedness ... A fundamental key to all this is to conduct this search with a proper line of scientific investigation.”

In the last ten years, Fetzer Franklin led breakthroughs in the following areas:

- 1 Relational Reality – the concept of the interconnection of all things at the quantum level now exists within mainstream physics academies in the world.
- 2 Metascience – the scientific study of the scientific method is a high priority for most major funding institutions in the world.
- 3 Advanced Protocols to study anomalous phenomena are becoming accepted. This could present an opportunity to advance mainstream investigation of extreme possibilities in the area of psi and subtle energy research. Psi, energy medicine, and subtle energy were dominant interests of John Fetzer. These revolutionary advanced protocols could help discern real effects from false positive effects which would catalyze substantial interest in these fields.

SCIENCE

“EXPLORING NEW FRONTIERS OF MATTER, LIFE, AND CONSCIOUSNESS. ADVANCING BREAKTHROUGHS IN RELATIONAL SCIENCE.”

Science not only changes the world around us by way of new technologies. Increasingly, the scientific world view transforms how we perceive ourselves - our identity as a human being. Does it matter to humanity's future when science projects an image of reality that is inherently fragmented, random, and disconnected? Could it make a difference when future science might instead unify reality's separate dimensions, including matter, life, and consciousness, without reducing one to the other? Is a scientific world view possible that is deeply integrated and fundamentally relational?

The Fetzer Franklin Fund explores this possibility of a new synthesis and seeks breakthroughs towards scientific views of reality that are integrated and relational. In conducting its program of open exploration, the Fetzer Franklin Fund focuses on foundational questions at the frontiers of physics, biology, and consciousness research. In addition, the Fund supports work that re-examines the foundations of science, including metascientific and metaphysical work, and the development of novel methodologies for both conventional and frontier research.

What are ‘scientific views of reality that are integrated and relational’?

The idea of the unity of knowledge, and of the unity of reality, has been part of both Eastern and Western traditions for thousands of years, including in ancient philosophies, pre-modern science, and mystical teachings as well as many spiritual systems. The modern scientific approach shares with previous traditions the goal of the unification of knowledge and of achieving a unified vision of reality in all its dimensions. This includes the scientific understanding of material existence, of living phenomena, and of human consciousness with its capacity to experience meaning. It is far too early to tell, however, whether a future, unifying scientific perspective could find common ground with age-old human intuitions about the interrelatedness and wholeness of reality. In particular, the question remains wide open as to whether modern science, in the manner presently conceived, is capable of providing “scientific views of reality that are integrated and relational”. The Fetzer Franklin Fund considers the possibility, and explores the theoretical and practical feasibility, of developing scientific views that are integrated and relational in the specific sense as described next.

What do we mean by ‘relational’?

The scientific view we call ‘relational’ is grounded in a relational theory of reality. Speaking abstractly, a relational theory is a way of understanding reality so that an object's properties, behaviors, or qualities, are meaningfully understood only in relationship to other objects. An ‘object’ in the above sense may be any concrete phenomenon or activity, including the results of a scientific measurement, but also any distinct human experience in general. The relational view implies that the separation and isolation of an object or some observed phenomenon from the surrounding web of relations invariably alters its “essential” nature, even if this is not immediately apparent. In the relational view, therefore, a specific phenomenon is “what it is” because of its fundamental relatedness to other phenomena. Technically speaking, ‘relata - the elements that make up a relation - do not precede the relation’. Popularly speaking, the phenomenon owes its existence as much to phenomena beyond itself as to itself.

Could science discover a new kind of causality in nature?

The relational perspective, as considered in the scientific program of the Fetzer Franklin Fund, investigates whether there are circumstances in nature when the individual and the collective, the local level and global level, may share powers of causation. For example, the formation of a ‘relational continuum’ might be explored, one that distributes power to both levels: neither ‘top-down’ nor ‘bottom-up’ causality. A specific phenomenon may be a function of relational co-causal dependencies across levels. The conventional scientific view does not embrace such a relational approach as a viable option at present. Specifically, the physicalist position of standard science is ‘bottom-up’ only, allowing causal flows to propagate in only one direction - from the lower, local level towards the higher, global level, such as from atoms and molecules to living cells and finally thinking brains. As a consequence, conventional science conceptualizes human consciousness, for example, as an ‘epiphenomenon’ that arises subsequently to material brain processes and therefore necessarily lacks any causal or co-causal powers.

A future science might proceed differently with an awareness of the relational nature of existence. Complexity or emergence theory, for example, begins to reveal why a phenomenon such as ‘cellular life’ can only make sense in terms of relational entities, i.e. entities as-a-whole (see our program in biology). The same goes for certain quantum phenomena, including nonlocal quantum entanglement, which calls for the treatment of two physically separated particles as a single entity. Possibly, a radically new conception of reality might emerge based upon a novel type of “quantum causality” (see also our program in physics). Both the biological and physical examples reflect the possibility that there may operate in nature a new kind of causality still to be understood and defined. The Fetzer Franklin Fund seeks to advance breakthroughs towards a new scientific understanding of causality in nature and the person. This includes the possibility of causal or co-causal relations beyond conventional causality as defined by local, i.e. ‘bottom-up only’, causal flows.

As said before, to recognize the primordial interdependency of all that exists has been a major goal of the pursuit of relational approaches throughout history. In the 21st century, the Fetzer Franklin Fund stands for a new approach to relational thinking, one that explores, as a novel scientific possibility, whether phenomena such as matter, life, and mind, including the phenomenon of being an ‘individual person’, exist primarily as a function of “being relational”. When applied to the “big questions” such as to the quest to understand the fundamental nature of matter, life and consciousness, how does the relational approach apply? For example, viewed from within a relational theory, might science conceptualize the phenomenon of consciousness differently? (see our program in consciousness research)

Are relational approaches to reality consistent with scientific rationality?

Importantly, the relational approach as researched and developed by the Fetzer Franklin Fund must not be in opposition to scientific rationality. To the contrary, we view the advancement of a relational theory of reality to be advancement of scientific rationality. The notion of scientific objectivity, however, as conventionally understood, might appear in a new light. Future developments in relational, i.e. non-reductionist, scientific approaches may reveal the normally hidden influence of the subjective element of consciousness in the formation of scientific facts, interpretations, models, and truths. Critically, this “influence” should not be misconstrued as some kind of forceful mind-over-matter action on reality, but reflects the core idea that consciousness invariably provides “formal structuring” to any kind of human experience, including the scientific experience of a concrete material reality and its subsequent scientific conceptualization. In alignment with this proposal, the emerging concept of a ‘model-dependent reality’, for example, is starting to receive serious attention by scientists and philosophers in the academic mainstream (see our program on the foundations of science).

Finally, at a minimum, the relational approach represents a powerful method of thought - a relational epistemology - for the integration of normally isolated ideas, events, or entities, and for combining them into a unified whole. It is also conceivable that the relational approach, when applied to science, might advance a new foundational account of reality - a relational metaphysics - revealing that “being is relational being”.

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PHYSICS

Relational Reality

In support of the notion of the ‘wholeness of reality’, two major breakthroughs were witnessed as part of 20th century science - quantum theory and the theory of emergence. The former describes the nature of reality at the smallest dimensions, and the latter describes the rise of novel order from randomness. Importantly, both these breakthroughs challenge strongly our ordinary assumptions about the nature of causality, and the role that causal powers play in the world we inhabit.

Usually, quantum theory and emergence theory are treated separately. A key strategy of the Relational Reality program of the Fetzer Franklin Fund is to explore whether there might be deep connections between these ground-breaking theories. Central to both is the idea that the whole system must be taken into account, not just the individual elements that constitute the system. This idea one might call the “Principle of Wholeness”. Again, the phenomenon of self-organization, described by emergence or complexity theory, and nonlocal entanglement phenomena described by quantum theory, cannot be accounted for by looking solely at the parts in isolation. Instead, the whole seems to have an objective status of its own, beyond the sum of the parts. The exact nature of the presumed objectivity of the whole - the Principle of Wholeness - is being studied increasingly by 21st century science, especially since it might imply an entirely new relationship between causality and information.

An essential dimension in such efforts concerns the act of scientific observation itself. The controversy surrounding ‘objective wholeness’ arises partly because it has proven difficult to define in scientific terms the human observer and the measurement process itself. Is reality observer-created? Or does reality exist independent of empirical measurement? What is the role of consciousness, if any, in fundamental theories, and their interpretation?

The Relational Reality program was established to maximize the benefits of trans-disciplinary exploration of foundational questions in physics and beyond. What is unique about our approach is that we are advancing a research strategy that is increasingly capable of pursuing questions in quantum foundations and emergence research in the context of consciousness studies and research into the foundations of science itself.

Could expansion of the notion of emergence to reality's smallest dimensions shed new light on the nature of the quantum? Could emergence shed new light even on the nature of space-time itself? For example, could emergence help advance new understanding of quantum nonlocality, the observation that vastly distant events might be instantly interconnected? This possibility may not be as far-fetched as it seems.

There is a pivotal observation in the foundations of quantum mechanics: the “emergence” of an interference pattern as a function of a single photon interfering with itself. In the paradigmatic single-photon double-slit experiment, the highly counter-intuitive quantum properties come into sharp focus: the possibility of ‘quantum self-interference’ - the photon interacts with itself and so, it is thought, the interference pattern emerges as the result of a process governed by intrinsic „self-interaction”.

Intrinsic self-interactivity, or self-reference, is the hallmark also of all emergent phenomena. That is, self-interacting system dynamics is at the core of emergence, self-organization, and complexity theory. Therefore, could the concept of emergence, which is built essentially upon the notion of self-reference, reveal novel insights on the reality of the quantum, including the single, self-interfering photon in the interference experiment? Increasingly scientists believe so. In short, could there be a link between quantum phenomena and emergent phenomena since both manifest such relational properties of the whole?

Presently, the Fetzer Franklin Fund explores this exciting possibility in projects, both experimental and theoretical, as well as in a major Symposium Series which gathers regularly frontier thinkers in quantum foundations. For more details see the ‘Emergent Quantum Mechanics’ Symposium Series in the Event section.

Show less 

BIOLOGY

New Visions of Life

What is life? Is the present view of the living state in need of expansion or revision? What might be new definitions of life? Is an element of minimal cognition implicit in any form of life, even the simplest? How might the prospect of ‘artificial life’ impact the image of the human being?

A new understanding of life as-a-whole and of the integrated living processes that make up an individual organism, including the human being, is the major goal of the scientific program in biology. With an awareness of the relational nature of living processes a new image of life may take hold in the future. Complexity or emergence theory, for example, begins to reveal why ‘cellular life’ can be best made sense of in terms of relational entities, that is, entities as-a-whole. Additionally, new branches in the life sciences are developing rapidly: synthetic biology, quantum biology, and informational systems biology, have opened up new research perspectives. In short, new developments in 21st century science, as increasingly captured by the terms emergence, the quantum, and information, are beginning to impact deeply the traditional conception of the living state.

The frontiers of biology may be on the verge of shifting from a DNA-centric view towards a more systemic, relational view. As was mentioned, the rise of “systems biology”, for example, indicates that biologist have begun to embrace whole-systems ideas from the science of self-organization. Consistent with these developments, the exploration of innovative field concepts also, including potentially information-encoding electromagnetic fields, may advance new understanding about the relational nature of living systems. A future merging of systems and quantum biology, together with a new process-oriented, informational perspective, might call for a new vision of life - a ‘relational biology’. The “New Visions of Life” program pursues foundational questions in biology by advancing a program which (i) offers a forum for dialogue regarding new research proposals, ideas, and theories, and (ii) provides support for work that advances new visions of the living state, including novel ideas for understanding evolutionary processes and the unity of life at the planetary scale.

Show less 

FOUNDATIONS

Metascience

What is science? What are inherent limitations to scientific understanding? Is scientific physicalism incomplete? What metaphysical assumptions underpin modern science? Is the reality that science describes absolute or model-dependent? How to differentiate science from pseudoscience? Might a future science include free will and consciousness in its frame? Is a relational science truly possible?

The program in foundations of science pursues several paths of inquiry. This ranges from metascientific investigations, and philosophy of science and mind, to explorations of scientific methodologies and their application in cutting-edge research. How does science differ from non-scientific approaches to understanding reality? For example, the program reconsiders the demarcation problem, that is, the problem of how scientific approaches can be distinguished from non-scientific ones. How to recognize ‘false-positive science’, or ‘pseudoscience’? Could phenomena “exist” in the world that elude capture by the scientific method? What status may such phenomena have in relation to science? The metascientific projects conducted by the Fetzer Franklin Fund explore - with scientific methodology - the nature of the scientific method itself. This includes inquiries also into the possible constitutive role of the scientific observer, and of the role of scientific interpretation. Finally, what is the relation between the scientific discovery process and the resulting scientific image of reality? What is the role of adopted world views?

The Foundations program of the Fetzer Franklin Fund pursues multiple questions concerning the foundational assumptions about the nature of science, including the scientific method and notions such as objectivity, interpretation, and truth. Presently, the Foundations program supports innovative approaches towards addressing the current reproducibility crises in science, seeking to establish new methods for obtaining reliable results. The focus of the program in foundations of science is to offer a forum for dialogue and to conduct work that advances new insight into the process of science itself.

Show less 

CONSCIOUSNESS

Extraordinary Possibilities

How does consciousness ‘structure’ our experience of reality? Or is reality perceived directly? Could future definitions of consciousness reach beyond neurodeterminism and physicalism? Why would the possession of genuine free will have to be considered an ‘extraordinary possibility’ according to present science? What is the nature of ‘scientific consciousness’?

The nature of consciousness and how the processes that underlie human self-awareness define the person, and the person's relationship with reality, are major topics of the program in consciousness research. Importantly, new concepts from the frontiers of physics and biology, as captured by the terms emergence or information, increasingly shape the 21st century view of consciousness. Presently, however, neuroscience often views consciousness as an epiphenomenal, hence causally powerless, „by-product” of neuronal activity. This definition is consistent with the ruling scientific metaphysics called physicalism - the position that all phenomena, including life and mind, are - at least in principle - wholly reducible to physical processes. From the perspective of conventional neuroscience, which seeks molecular explanations, the possibility, therefore, that consciousness might have some degree of autonomy, even in the weakest sense, represents an ‘extraordinary possibility’, beyond the bounds of current understanding. We here define an extraordinary possibility as one that might exist at the very limits of science but possibly not beyond future scientific understanding. For example, viewed from within a relational theory of the world, might a future science conceptualize the phenomenon of consciousness differently than now?

The Foundations program of the Fetzer Franklin Fund investigates the feasibility of a relational science consisting of alternatives. Non-conventional approaches to understanding consciousness include questions such as: Are there desirable alternatives to the neurodeterminist view of consciousness as an entity lacking causal or co-causal powers? Might informational, relational, or emergent views of consciousness allow for a different perspective? The main focus of the program in consciousness research is to offer a forum for dialogue and to provide support for work that advances new insight into the power of human awareness, self-awareness, and the possible relational nature of consciousness.

Show less 